CLAIMS

We claim:

1. A computer software product that includes a medium readable by a processor, the medium having stored thereon a set of instructions for creating and implementing an architecture for designing a job training program for an organization, comprising:

a) a first sequence of instructions which, when executed by the processor, causes said processor to provide a set of analysis templates prompting a user for information for assessing the organization's needs, capacities, and resources, and for saving the user's responses to said templates in serialized objects;

b) a second sequence of instructions which, when executed by the processor, causes said processor to provide a set of design templates based upon a rule-based system analysis of the user's responses to said analysis templates which prompt the user for information tailored to a web-based instructional course for the organization, and causes said processor to receive the user's responses to said templates, and to store the user's responses in serialized objects; and

c) a third sequence of instructions which, when executed by the processor, causes said processor to parse the serialized objects, provide the user with an outline tree of a web-based instructional course and with nodes having content supplied by the serialized objects, accept user editing of the

24   outline tree and natural language editing of the nodes, and

25   generate a web application implementing a job training course

26   from the edited outline tree and nodes.

1   2.   The computer software product according to claim 1,

2   further comprising a fourth sequence of instructions which, when

3   executed by the processor, causes said processor to provide a set

4   of guidelines for carrying out an analysis phase, a design phase,

5   a development phase, an implementation/delivery phase, and an

6   evaluation/maintenance phase for assessing the organization's job

7   training and performance needs, the guidelines being accessible by

8   said first, second and third sets of instructions.

1   3.   The computer software product according to claim 1,

2   wherein said first, second, and third sets of instructions are

3   capable of being deployed on a computer network and of being edited

4   by multiple users in both synchronous and asynchronous modes in

5   order to produce a web application for job training and performance

6   by collaborative effort.

4. The computer software product according to claim 1, wherein said second set of instructions further includes instructions for:

(a) developing and sequencing objectives;

(b) specifying instructional strategies and methods;

(c) evaluating instructional objectives; and

(d) examine organizational issues.

5. The computer software product according to claim 1, wherein said third set of instructions further includes a set of instructions for permitting a user to supplement textual material with graphics files, audio files, video files and multimedia files.

6. The computer software product according to claim 1, wherein said third set of instructions further includes a set of instructions for permitting a user to supplement course material with tests, including user supplied questions and designations of correct answers, points assignments to the questions, standards for acceptable course progress, and feedback for learners.

7. The computer software product according to claim 1, wherein said third set of instructions further includes at least one application program interface function for integrating a course produced by said third set of instructions with a learning management system.

8.   The computer software product according to claim 1, wherein said first set of instructions further includes instructions for:

(a) needs assessment;

(b) needs analysis;

(c) education analysis;

(d) learning analysis;

(e) job analysis;

(f) task analysis;

(g) learner analysis;

(h) resource analysis; and

(i) existing materials analysis.

9.   The computer software product according to claim 1, wherein said third set of instructions further includes a set of instructions capable of producing a web application job training course permitting multiple learners to access the course synchronously and asynchronously for collaborative job training.

1   10.   An automated job training and performance tool for

2 designing a job training program for an organization, comprising:

3   a) a computer having a microprocessor, an area of main

4 memory for executing program code under the direction of the

5 microprocessor, and a disk storage device for storing data and

6 program code;

7   b) data input means for entering data input cognizable by

8 said microprocessor;

9   c) a software program code stored in said disk storage

10 device and executing in main memory under the direction of

11 said microprocessor, the software program including:

12   i) analysis template means for providing a set of

13 analysis templates prompting a user for information for

14 assessing the organization's needs, capacities, and

15 resources, and for saving the user's responses to said

16 templates in serialized objects;

17   ii) design template means for providing a set of

18 design templates based upon a rule-based system analysis

19 of the user's responses to said analysis templates which

20 prompt the user for information tailored to a web-based

21 instructional course for the organization, and causes

22 said processor to receive the user's responses to said

23 templates, and to store the user's responses in

24 serialized objects; and

25   iii) web author means for parsing the serialized

26 objects, providing the user with an outline tree of a

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27 web-based instructional course and with nodes having
28 content supplied by the serialized objects, accepting
29 user editing of the outline tree and natural language
30 editing of the nodes, and generating a web application
31 implementing a job training course from the edited
32 outline tree and nodes.

1 11. The automated job training and performance tool according
2 to claim 10, wherein said software program code further comprises
3 means for providing a set of guidelines for carrying out an
4 analysis phase, a design phase, a development phase, an
5 implementation/delivery phase, and an evaluation/maintenance phase
6 for assessing the organization's job training and performance
7 needs, the guidelines being accessible by said analysis template
8 means, said design template means and said web author means.

1 12. The automated job training and performance tool according
2 to claim 10, wherein said analysis template means, said design
3 template means, and said web author means are capable of being
4 deployed on a computer network and of being edited by multiple
5 users in both synchronous and asynchronous modes in order to
6 produce a web application for job training and performance by
7 collaborative effort.

13. The automated job training and performance tool according to claim 10, wherein said design template means further includes means for:

      (a) developing and sequencing objectives;

      (b) specifying instructional strategies and methods;

      (c) evaluating instructional objectives; and

      (d) examine organizational issues.

14. The automated job training and performance tool according to claim 10, wherein said web author means further includes means for permitting a user to supplement textual material with graphics files, audio files, video files and multimedia files.

15. The automated job training and performance tool according to claim 10, wherein said web author means further includes means for permitting a user to supplement course material with tests, including user supplied questions and designations of correct answers, points assignments to the questions, standards for acceptable course progress, and feedback for learners.

16. The automated job training and performance tool according to claim 10, wherein said web author means further includes at least one application program interface function for integrating a course produced by said web author means with a learning management system.

17. The automated job training and performance tool according to claim 10, wherein said analysis template means further includes means for:

        (a) assessing needs;

        (b) analyzing needs;

        (c) analyzing education;

        (d) analyzing learning;

        (e) analyzing jobs;

        (f) analyzing tasks;

        (g) analyzing learners;

        (h) analyzing resources; and

        (i) analyzing existing materials.

18. The automated job training and performance tool according to claim 10, wherein said web author means further includes means capable of producing a web application job training course permitting multiple learners to access the course synchronously and asynchronously for collaborative job training.

19.   A computer software product that includes a medium readable by a processor, the medium having stored thereon a set of instructions for creating and implementing an architecture for designing a job training program for an organization, comprising:

a) a first sequence of instructions which, when executed by the processor, causes said processor to provide a set of analysis templates based upon rules-based systems prompting a user for information for assessing the organization's needs, capacities, and resources, and causes said processor to receive the user's responses to said templates in serialized objects, and compiles, weights, calculates, filters/sorts the user's responses;

b) a second sequence of instructions which, when executed by the processor, causes said processor to provide a set of design templates based upon a rule-based systems for the user's responses to said analysis templates and to said design templates which prompt the user for information tailored to delivery systems and instructional strategies for courses for the organization, and causes said processor to receive the user's responses to said templates in serialized objects and compiles, weights, calculates, filters/sorts the user's responses in order to produce a design plan for courses; and

c) a third sequence of instructions which, when executed by the processor, causes said processor to parse the serialized objects, provide the user with an outline tree of a web-based instructional course and with nodes having content

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supplied by the serialized objects, accept user editing of the outline tree and natural language editing of the nodes, and generate a web application implementing a job training course from the edited outline tree and nodes.